0590
0707

#3

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/988,462

DATE: 01/08/2002
TIME: 15:38:44

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SEQUENCE LISTING

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 4 (1) GENERAL INFORMATION:
 6      (i) APPLICANT: Koziel, Michael G.
 7                    Desai, Nalini M.
 8                    Lewis, Kelly S.
 9                    Kramer, Vance C.
10                    Warren, Gregory W.
11                    Evola, Stephen V.
12                    Crossland, Lyle D.
13                    Wright, Martha S.
14                    Merlin, Ellis J.
15                    Launis, Karen L.
W--> 16               Rothstein, Steven J.
W--> 17               Bowman, Cindy G.
W--> 18               Dawson, John L.
W--> 19               Dunder, Erik M.
W--> 20               Pace, Gary M.
W--> 21               Suttie, Janet L.
23      (ii) TITLE OF INVENTION: SYNTHETIC DNA SEQUENCE HAVING ENHANCED
24                               INSECTICIDAL ACTIVITY IN MAIZE
26     (iii) NUMBER OF SEQUENCES: 94
28      (iv) CORRESPONDENCE ADDRESS:
29            (A) ADDRESSEE: Syngenta Biotechnology, Inc.
30            (B) STREET: 3054 Cornwallis Road
31            (C) CITY: Research Triangle Park
32            (D) STATE: NC
33            (E) COUNTRY: USA
34            (F) ZIP: 27709
36       (v) COMPUTER READABLE FORM:
37            (A) MEDIUM TYPE: Floppy disk
38            (B) COMPUTER: IBM PC compatible
39            (C) OPERATING SYSTEM: PC-DOS/MS-DOS
40            (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
42      (vi) CURRENT APPLICATION DATA:
C--> 43       (A) APPLICATION NUMBER: US/09/988,462
C--> 44       (B) FILING DATE: 20-Nov-2001
45            (C) CLASSIFICATION:
59     (vii) PRIOR APPLICATION DATA:
48            (A) APPLICATION NUMBER: US 09/547,422
49            (B) FILING DATE: 11-APR-2000
52            (A) APPLICATION NUMBER: US 08/459,504
53            (B) FILING DATE: 02-JUN-1995
56            (A) APPLICATION NUMBER: US 07/951,715
57            (B) FILING DATE: 25-SEP-1992
60            (A) APPLICATION NUMBER: US 07/772,027
61            (B) FILING DATE: 04-OCT-1991
63    (viii) ATTORNEY/AGENT INFORMATION:
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64              (A) NAME: Meigs, J. Timothy
65              (B) REGISTRATION NUMBER: 38,241
66              (C) REFERENCE/DOCKET NUMBER: S-18805I
68      (ix) TELECOMMUNICATION INFORMATION:
69              (A) TELEPHONE: (919)541-8587
70              (B) TELEFAX: (919)541-8689
72 (2) INFORMATION FOR SEQ ID NO: 1:
74      (i) SEQUENCE CHARACTERISTICS:
75              (A) LENGTH: 3468 base pairs
76              (B) TYPE: nucleic acid
77              (C) STRANDEDNESS: single
78              (D) TOPOLOGY: linear
80      (ii) MOLECULE TYPE: DNA (genomic)
82     (iii) HYPOTHETICAL: NO
84      (vi) ORIGINAL SOURCE:
85              (A) ORGANISM: Bacillus thuringiensis kurstaki
86              (B) STRAIN: HD-1
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90              (B) LOCATION: 1..3468
91              (D) OTHER INFORMATION: /product= "Full-length native
92 cryIA(b)"
93 /note= "Appears in Figures 1 and 4 as BTHKURHD."
96      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
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210 AAAGAATTAG AGTACTTCCC AGAAACCGAT AAGGTATGGA TTGAGATCGG AGAAACGGAA   3420
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214 (2) INFORMATION FOR SEQ ID NO: 2:
216      (i) SEQUENCE CHARACTERISTICS:
217          (A) LENGTH: 3468 base pairs
218          (B) TYPE: nucleic acid
219          (C) STRANDEDNESS: single
220          (D) TOPOLOGY: linear
222     (ii) MOLECULE TYPE: other nucleic acid
223          (A) DESCRIPTION: /desc = "Synthetic DNA"
225    (iii) HYPOTHETICAL: NO
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229          (A) NAME/KEY: misc_feature
230          (B) LOCATION: 1..3468
231          (D) OTHER INFORMATION: /product= "Full-length pure maize
232 optimized synthetic Bt"
233 /note= "Disclosed in Figure 3 as syn1T.mze"
236     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
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242 AGCCTGACCC AGTTCCTGCT GAGCGAGTTC GTGCCCGGCG CCGGCTTCGT GCTGGGCCTG   180
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314 CTGGAGATCT ACCTGATCCG CTACAACGCC AAGCACGAGA CCGTGAACGT GCCCGGCACC  2340
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324 CGCGACAAGC GCGAGAAGCT GGAGTGGGAG ACCAACATCG TGTACAAGGA GGCCAAGGAG  2640
326 AGCGTGGACG CCCTGTTCGT GAACAGCCAG TACGACCGCC TGCAGGCCGA CACCAACATC  2700
328 GCCATGATCC ACGCCGCCGA CAAGCGCGTG CACAGCATCC GCGAGGCCTA CCTGCCCGAG  2760
330 CTGAGCGTGA TCCCCGGCGT GAACGCCGCC ATCTTCGAGG AGCTGGAGGG CCGCATCTTC  2820
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334 CTGAGCTGCT GGAACGTGAA GGGCCACGTG GACGTGGAGG AGCAGAACAA CCACCGCAGC  2940
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344 GGCACCTACA CCAGCCGCAA CCGCGGCTAC GACGGCGCCT ACGAGAGCAA CAGCAGCGTG    3240
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354 (2) INFORMATION FOR SEQ ID NO: 3:
356   (i) SEQUENCE CHARACTERISTICS:
357   (A) LENGTH: 1947 base pairs
358   (B) TYPE: nucleic acid
359   (C) STRANDEDNESS: single
360   (D) TOPOLOGY: linear
362   (ii) MOLECULE TYPE: other nucleic acid
363   (A) DESCRIPTION: /desc = "Synthetic DNA"
365 (iii) HYPOTHETICAL: NO
368   (ix) FEATURE:
369   (A) NAME/KEY: misc_feature
370   (B) LOCATION: 1..1947
371   (D) OTHER INFORMATION: /product= "Truncated synthetic
372 maize optimized cryIA(b) gene"
373 /note= "Disclosed in Figures 1, 2, 3, 4 and 5 as bssyn."
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384 GTGGACATCA TCTGGGGCAT CTTCGGCCCC AGCCAGTGGG ACGCCTTCCT GGTGCAGATC     240
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L:44 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:16 M:259 W: Allowed number of lines exceeded, (i) APPLICANT:
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L:1265 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
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Input Set : **A:\SEQUENCE LISTING.txt**
Output Set: **N:\CRF3\01082002\I988462.raw**

```
L:1425 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1429 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1433 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1437 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1441 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1445 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1449 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1453 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1457 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
L:1461 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8
```